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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
QUELER, ADAM M

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/361,782	DEEN ET AL.	
	Examiner	Art Unit	
	Adam M Queler	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 December 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *17 December 2002* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This action is responsive to communications: Amendment A and Formal Drawings, both filed on 12/17/2002.

2. Claims 1-47 are pending in the case. Claims 1, 5, 14, 20, 31, 37, 41, and 44 are independent claims.

Specification

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. For example on page 3, line 8, "http://dsig.org". Applicant is required to delete **all** embedded hyperlinks and/or other forms of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh et al. (USPN 6012098—filed on 2/23/1998).

Regarding independent claim 37, Bayeh discloses gathering the data (col. 10, lines 46-58), and formatting the data into XML with a data servlet, which is equivalent to the emitter object (col. 11, lines 1-2). Bayeh teaches the data will be formatted as an XML stream (col. 11, ll. 1-2). This inherently implies a predefined order to the data. Bayeh is silent on passing the emitter object the data gathered. However, Bayeh does teach that the data servlet does the gathering

itself. Therefore, it would have been obvious to one of ordinary skill in the art, to split the data servlet into two separate objects, and pass data between them, in order to divide the work between objects.

6. Claims 1-11, 13, 14, 16-19, 31-35, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh, in view of Schloss et al. (USPN 6249844—filed on 11/13/1998).

Regarding independent claim 1, Bayeh et al. (Bayeh) discloses processing and formatting results as XML (FIG 5, step 260). Preparing is broadly interpreted by the examiner to be equivalent to formatting and processing. Bayeh also discloses sending the document as HTML. It would have been obvious for one of ordinary skill in the art to send the unconverted XML, as most web browsers were capable of reading XML. Bayeh is silent on preparing only a portion of the XML and then repeating the steps. Schloss et al. (Schloss) teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, to allow their compatibility with networks that communicate in packets.

Regarding dependent claim 2, Bayeh discloses gathering the data (col. 10, lines 46-58), and formatting the data into XML with a data servlet, which is equivalent to an emitter object (col. 11, lines 1-2). Bayeh is silent on passing the emitter object the data gathered. However, Bayeh does teach that the data servlet does the gathering itself. Therefore, it would have been obvious to one of ordinary skill in the art, to split the data servlet into two separate objects, and pass data between them, in order to make programming each object easier.

Regarding dependent claim 3, Bayeh discloses gathering the data (col. 10, lines 46-58), which is equivalent to a gathering object.

Regarding dependent claim 4, Bayeh discloses receiving a request (col. 10, lines 19-25).

Regarding independent claim 5, claim 5 is rejected similarly as dependent claim 1 as described above, and in addition; Bayeh discloses receiving a request (col. 10, lines 19-25).

Regarding dependent claim 10, Bayeh discloses gathering the data (col. 10, lines 46-58), and formatting the data into XML with a data servlet, which is equivalent to a data formatting mechanism (col. 11, lines 1-2). However, it would have been obvious to one of ordinary skill in the art at the time of the invention to divide this work among a data-gathering mechanism, and a data-formatting mechanism as this would make programming each object easier.

Regarding dependent claims 13, the program of claim 13 is the program for carrying out the method of claim 5 and is rejected under the same rationale.

Regarding dependent claims 11, Bayeh teaches the response sending mechanism converts the XML into HTML, instead of just sending it (col. 11, lines 34-43). It would have been obvious for one of ordinary skill in the art to send the unconverted XML, as most web browsers were capable of reading XML.

Regarding independent claim 31, Bayeh discloses a combined request-receiving mechanism (col. 10, lines 30-40) and response-preparing mechanism (col. 11, lines 1-2). Bayeh discloses sending the response with a rendering servlet (col. 11, lines 20-24), which is equivalent to a response-sending mechanism. Bayeh is silent on preparing only a portion of the XML and then repeating the steps. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, to allow their compatibility with networks that communicate in packets.

Regarding independent claim 14, Bayeh et al. (Bayeh) discloses receiving a request (col. 10, lines 19-25). Bayeh also discloses gathering the data (col. 10, lines 46-58), and formatting the data into XML with a data servlet, which is equivalent to the emitter object (col. 11, lines 1-2). Bayeh also discloses sending the response (col. 11, lines 20-24), which is equivalent to emitting the formatted data. Bayeh is silent as to having separate objects doing separate tasks, however, it would have been obvious to one of ordinary skill in the art to have the emitter object do the formatting and emitting, as it would ease programming in an object oriented environment. Bayeh is also silent on preparing only a portion of the XML and then repeating the steps. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, to allow their compatibility with networks that communicate in packets.

Regarding dependent claim 6, 16, and 32, Bayeh is silent as to calling and emitting multiple times. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to call the emitter multiple times and emitting multiple times, in order to process all the segments.

Regarding dependent claim 19, the program of claim 19 is the program for carrying out the method of claim 14 and is rejected under the same rationale.

Regarding dependent claim 35, Bayeh discloses a data servlet, equivalent to a response-preparing mechanism that gathers the data (col. 10, lines 46-58), and formats it (col. 11, lines 1-2).

Regarding dependent claim 38, Bayeh is silent on emitting only a portion of the XML. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, to allow their compatibility with networks that communicate in packets.

Regarding dependent claim 7, 17, and 34, Bayeh is silent as to calling and emitting in a defined order. Schloss discloses a method of splitting an XML document into segments, by processing the data in order (col. 3, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art to pass and emit the segments in a defined order since they would have been generated in order.

Regarding dependent claims 8, claim 8 is rejected similarly as dependent claim 7, as described above, and in addition; Bayeh and Schloss are silent as to the XML document comprising a multi-status response. However, it would have been obvious to one of ordinary skill in the art to include a multi-status response, as it would not be structurally different from any other XML document in terms of transporting

Regarding dependent claims 9, 18 and 33, Bayeh and Schloss are silent as to the XML document comprising a multi-status response. However, it would have been obvious to one of ordinary skill in the art to include a multi-status response, as it would not be structurally different from any other XML document in terms of transporting.

7. Claims 20-26, 30, 41-42, and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh and Schloss and further in view of Whitehead, "WEBDAV: IETF Standard for Collaborative Authoring on the Web.

Regarding independent claim 20, Bayeh discloses receiving an XML request (col. 10, lines 19-25). Bayeh also discloses a servlet, equivalent to an object for gathering a response to the request (col. 10, lines 30-40). Bayeh and Schloss are silent as to passing the emitter object the data gathered. However, Bayeh does teach that the data servlet does the gathering itself. Therefore, it would have been obvious to one of ordinary skill in the art, to split the data servlet into two separate objects, and pass data between them.

Bayeh is silent as to generating a portion of the response. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, as generating parts of documents based on segments of incoming data, was a common practice of streaming data.

Bayeh and Schloss are silent as to the request containing a WebDAV method. Whitehead discloses WebDAV request methods (p. 35), which inherently would have been determined before any further processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Whitehead with Bayeh and Schloss because WebDAV responses are XML (p.36, col. 2).

Regarding independent claim 41, Bayeh discloses receiving a request (col. 10, lines 19-25). Bayeh also discloses a servlet, equivalent to an object for gathering a response to the request, which would correspond to the request (col. 10, lines 30-40). Bayeh discloses formatting the data into XML with the above servlet, which is equivalent to an emitter object (col. 11, lines 1-2). Bayeh is silent on passing the emitter object the data gathered. However, Bayeh does teach that the servlet does the gathering itself. Therefore, it would have been obvious to one of

ordinary skill in the art, to split the data servlet into two separate objects, request and emitter, to ease programming in an object-oriented environment.

Bayeh discloses sending the response with a rendering servlet (col. 11, lines 20-24), which is equivalent to a response-sending mechanism. Bayeh teaches the response sending mechanism converts the XML into HTML, instead of just sending it (col. 11, lines 34-43). It would have been obvious for one of ordinary skill in the art to send the unconverted XML, as most web browsers were capable of reading XML.

Bayeh is silent as to calling and emitting multiple times. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, to allow their compatibility with networks that communicate in packets. It would have been further obvious call the emitter multiple times and emitting multiple times, in order to process these segments.

Bayeh and Schloss are silent as to the request containing a HTTP verb. Whitehead discloses WebDAV request methods (p. 35), which inherently would have been determined before any further processing. WebDAV methods are equivalent to HTTP verbs as the Applicant admits in the specification, on p. 15, ll. 1-4. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Whitehead with Bayeh and Schloss because WebDAV responses are XML (p.36, col. 2).

Regarding dependent claim 21, Bayeh discloses sending the response with a rendering servlet (col. 11, lines 20-24), which is equivalent to a response-sending mechanism. Bayeh teaches the response sending mechanism converts the XML into HTML, instead of just sending it (col. 11,

lines 34-43). It would have been obvious for one of ordinary skill in the art to send the unconverted XML, as most web browsers were capable of reading XML.

Regarding dependent claim 22, it would have been obvious to one of ordinary skill in the art to send the XML document without building the entire tree, as it was common to send raw text without processing it.

Regarding dependent claim 23, Bayeh and Whitehead are silent as to calling and emitting multiple times. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to call the emitter multiple times and emitting multiple times, in order to process all the segments.

Regarding dependent claim 24, Bayeh and Whitehead are silent as to calling and emitting multiple times. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to call the emitter multiple times and emitting multiple times, in order to process all the segments.

Regarding dependent claims 25 and 42, Bayeh and Whitehead are silent as to calling and emitting in a defined order. Schloss discloses a method of splitting an XML document into segments, by processing the data in order (col. 3, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art to pass and emit the segments in a defined order since they would have been generated in order.

Regarding dependent claim 26, Bayeh and Whitehead are silent as to calling and emitting multiple times. Schloss teaches that an XML document can be split up into segments, and then

processed (col. 3, lines 21-49). Therefore, it would have been further obvious to one of ordinary skill in the art at the time of the invention to call the emitter multiple times and emitting multiple times, in order to process all the segments.

Regarding dependent claims 30, the program of claim 30 is the program for carrying out the method of claim 20 and is rejected under the same rationale.

Regarding independent claim 44, Bayeh discloses a servlet, equivalent to code that receives an XML request (col. 10, lines 30-40). Bayeh is silent on preparing only a portion of the XML and then repeating the steps. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, as splitting data into segments and sending them all, was a common optimization in network transport.

Bayeh and Schloss are silent as to the request containing a HTTP verb. Whitehead discloses WebDAV request methods (p. 35), which inherently would have been determined before any further processing. WebDAV methods are equivalent to HTTP verbs as the Applicant admits in the specification, on p. 15, ll. 1-4. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Whitehead with Bayeh and Schloss because WebDAV responses are XML (p.36, col. 2).

Regarding dependent claim 45, Bayeh discloses having unique servlets for different purposes, or verbs (col. 10, lines 30-40).

Regarding dependent claim 46, Bayeh discloses calling another object and passing the information to be included in the response (col. 11, lines 20-24).

Regarding dependent claim 47, Bayeh is silent on passing the data to another object in order to format it. However, Bayeh does teach that formatting is done by the first object. It would have been obvious to one of ordinary skill in the art to split the first object into two separate objects, as it would ease programming in an object-oriented environment.

8. Claims 27-29 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh in view of Schloss, in view of Whitehead as applied to claim 20 above, and further in view of Kavner (USPN 6366947—filed on 1/20/1998).

Regarding dependent claim 27, Bayeh, Whitehead, and Schloss are silent as to using a buffer. Kavner discloses a buffer that buffers a response until it is filled, and then empties, or sends the buffer to the client (col. 10, lines 7-14). It would have been obvious to one of ordinary skill in the art to modify Kavner into Bayeh and Schloss in order to buffer the response.

Regarding dependent claims 28 and 43, Bayeh, Whitehead, Schloss, and Kavner are silent as to sending less then an entirety of a response. However, it would have been obvious to one of ordinary skill in the art to send less the entirety of the response, since each portion is syntactically correct.

Regarding dependent claims 29, the buffer disclosed in Kavner must inherently have a threshold in order for the buffer to be full.

9. **Claims 12, 15, 36, 39, and 40, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh in view of Schloss as applied to claims 11, 20, 31, 38 and 41 above, and further in view of Kavner.**

Regarding dependent claim 12, 36, and 39, Bayeh and Schloss are silent as to using a buffer. Kavner discloses a buffer that buffers a response until it is filled, and then empties, or sends the

buffer to the client (col. 10, lines 7-14). There inherently must be a threshold in order for the buffer to be full. It would have been obvious to one of ordinary skill in the art to modify Kavner into Bayeh and Schloss in order to buffer the response.

Regarding dependent claim 15, Bayeh and Schloss are silent as to using a buffer. Kavner discloses a buffer that buffers a response until it is filled, and then empties, or sends the buffer to the client (col. 10, lines 7-14). There intrinsically must be a threshold in order for the buffer to be full. It would have been obvious to one of ordinary skill in the art to modify Kavner into Bayeh in order to buffer the response.

Regarding dependent claim 40, Bayeh, Schloss, and Kavner are silent as to sending less then an entirety of a response. However, it would have been obvious to one of ordinary skill in the art to send less the entirety of the response, since each portion is syntactically correct.

Response to Arguments

10. Applicant's arguments with respect to claims 20-30 and 37-47 have been considered but are moot in view of the new ground(s) of rejection.

Regarding Applicant's remarks on pp. 19-21:

In the Applicant's discussion of the Bayeh reference, Applicant says, "the rendering servlet **must** parse the XML data stream, and reformat into HTML. **This is necessary**, because browsers by convention, expect to receive data that is formatted by with HTML." The Office agrees with the Applicant that this is what Bayeh teaches, and at the time of Bayeh's invention this was the case. However, at the time of the instant invention it was known that browsers were able to read many formats. For example, in specific browsers, such as Microsoft's Internet Explorer 5.0 XML

could have been processed and read ("XML in Netscape and Explorer", p.1) at the time of the instant invention ("Internet Explorer", p.1).

Regarding Applicant's remarks on pp. 22-23:

Bayeh teaches away from the replacement of the HTML document with an XML document specifically because of the technological limitation that no longer existed as noted above. Therefore the replacement would have been obvious at the time of the invention.

Regarding Applicant's remarks on p. 23, line 14 - p. 24, line 6:

The Applicant interprets Schloss as simply describing that an XML document can be parsed. However, as noted in the cited portion of Schloss, specifically on col. 4, lines 39-24, "It is an object of the present invention to select a subset of the segments contained in a document and recognize them as persistent objects." Schloss teaches, as noted in the rejection, that an XML document can be split up into segments, and then processed. The specific method is located from col. 6, line 31 through col. 7, line 38.

Regarding Applicant's remarks on p. 24, regarding claim 5:

The Examiner agrees that Bayeh neither discloses nor suggests preparing or sending only a portion of a response, as was said in the original rejection. However, as recited above, Schloss does suggest processing portions of an XML document, and therefore the claim would have been obvious as originally rejected.

Regarding Applicant's remarks on p. 25, regarding claim 14:

The Applicant's remarks on the Bayeh teaching have been addressed above. In addition, the added limitation of the XML response be sent with out having a tree built, is newly rejected in accordance with the above interpretation of Schloss.

Regarding Applicant's remarks on p.27-28, regarding claim 31:

As noted previously, the Office contends that Schloss does add significance to the rejection by discussing how XML documents can be split up into segments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam M Queler whose telephone number is (703) 308-5213. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R Herndon can be reached on (703) 308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5631.

AQ
February 24, 2003

HEATHER R. HERNDON
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